Part 70 Operating Permit Amendment

Permit Amendment No.: 2631-185-0001-V-01-6 Effective Date: August 31, 2005

Facility Name: **Packaging Corporation of America**
5495 Lake Park-Clyattville Road
Clyattville, Georgia 31601 (Lowndes County)

Mailing Address: P.O. Box 1048
Valdosta, Georgia 31603-1048

Parent/Holding Company: Packaging Corporation of America, Inc.

Facility AIRS Number: 04-13-185-00001

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Georgia Rules for Air Quality Control, Chapter 391-3-1, adopted pursuant to and in effect under the Act, the Permittee described above is issued a construction permit for:

> The modification of the No.3 Brown Stock Washer System (Source Code: G016, re-designated as No. 3A washer) and installation of vent collection equipment to route vent gases to the existing HVLC system for destruction to meet compliance with 40 CFR 63 Subpart S (Phase II). Various improvements to the Paper Machine System (Source Code: G014) to improve product quality and energy efficiency. Various corrections to existing permit conditions. Also, all previous amendment requirements were incorporated into this amendment and all amendments were revoked.

This Permit Amendment shall also serve as a final amendment to the Part 70 Permit unless objected to by the U.S. EPA or withdrawn by the Division. The Division will issue a letter when this Operating Permit amendment is finalized.

This Permit Amendment is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit Amendment and Permit No. 2631-185-0001-V-01-0. Unless modified or revoked, this Permit Amendment expires upon issuance of the next Part 70 Permit for this source.

This Permit Amendment may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. 15946 dated January 7, 2005; any other applications upon which this Permit Amendment or Permit No. 2631-185-0001-V-01-6 are based; supporting data entered therein or attached thereto; or any subsequent submittal or supporting data; or for any alterations affecting the emissions from this source.

This Permit Amendment is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **21** pages, which pages are a part of this Permit Amendment, and which hereby become part of Permit No. 2631-185-0001-V-01-0.

Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION

1.3 Process Description of Modification

Application No. 15946 was submitted by the facility for replacement of the current hood, drums and vats for the No. 3 Brown Stock Washer System (System Source Code: G016) with low-flow design hood/drum/vat equipment and installation and tie-in of vent collection equipment; to allow collection of the washer hood and associated tanks vent gases in the existing HVLC system for destruction in one of the two combination fuel boilers or the thermal oxidizer and to meet compliance with the April 17, 2006 requirements of 40 CFR 63 Subpart S - *"National Emission Standard for Hazardous Air Pollutants from the Pulp and Paper Industry."* The facility also proposes to make improvements to the Paper Machine System (System Source Code: G014) for better utilization of the capacity of the pulp mill on all grades of product, to improve product quality and consistency, and to improve energy efficiency. The No. 4 Chemiwasher System (System Source Code: G039) is already in compliance with 40 CFR 63 Subpart S and is not being modified.

The collection and thermal destruction of the No. 3 Brown Stock Washer System vent gases, followed by scrubbing for SO_2 removal, is considered BACT for this unit. The use of clean water (i.e., low-VOC/low HAP water) for shower water on the No. 3 Brown Stock Washer System and as the final high- pressure shower and knock off shower water for the No. 4 Chemiwasher is considered BACT for the Paper Machine System. Also, the facility has accepted a facility-wide twelve-month rolling total paper production limit.

For the purpose of establishing post-project equipment maintenance records, to avoid confusion between the new equipment and the old equipment being removed, the permitted washer designation was changed from No. 3 to No. 3A.

Additionally, the requirements from all previous Permit Amendments (Permit Amendment Nos. 2631-185-0001-V-01-1, issued October 7, 2003 - based on Application Nos. 14645 and 14499 dated August 4, 2003; 2631-185-0001-V-01-2 issued February 24, 2004 - based on Application No.14770 dated October 14, 2003; 2631-185-0001-V-01-3 issued April 21, 2004 - based on Application No. 14783 dated November 14, 2003; 2631-185-0001-V-01-4 issued June 7, 2004 – based on Application No. 15344 dated May 5, 2004; and 2631-185-0001-V-01-5 issued March 7, 2005 – based on Application No. 15436 dated June 23, 2004) were incorporated into this amendment and those amendments were revoked. Various Permit Conditions are being modified due to errors.

PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

2.1 Emission Limits

2.1.1 The Permitteee shall not operate the facility at a production rate of more than 547,620 oven-dried tons of paper (equivalent to 575,000 machine-dried tons of paper at 5% moisture), as calculated on a 12-month rolling total.
[40 CFR 52.21 BACT Limit]

PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.1.1 Modified Emission Units

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	**Description**	**Applicable Requirements / Standards**	**Corresponding Permit Conditions**	**ID No.**	**Description**
40 CFR 63 Subpart MM Site-Specific Requirements					
6063	No. 4 Lime Kiln	40 CFR 60 Subpart BB 40 CFR 63 Subpart MM 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g) 391-3-1-.02(2)(gg)	3.2.1, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 3.3.28, 3.4.1 through 3.4.3, 3.4.16, 4.2.1, 4.2.2, 4.2.7 through 4.2.11, 5.2.1, 5.2.3, 5.3.3, 6.1.7, 6.2.15, 6.2.21, 6.2.22, 6.2.23, 6.2.28 through 6.2.31	C009	ESP
7000	No. 1 Recovery Furnace	40 CFR 63 Subpart MM 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g) 391-3-1-.02(2)(gg)1(i)	3.3.2, 3.3.5, 3.3.6, 3.3.28, 3.4.4 through 3.4.7, 4.2.1, 4.2.2, 4.2.7 through 4.2.11, 5.2.1, 5.2.3, 5.3.3, 6.1.7, 6.2.1, 6.2.2, 6.2.9 through 6.2.14, 6.2.21, 6.2.22, 6.2.23, 6.2.28 through 6.2.31	C011	ESP
7010	No. 2 Recovery Furnace	40 CFR 63 Subpart MM 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g) 391-3-1-.02(2)(gg)1(i)	3.3.2, 3.3.28, 3.4.4 through 3.4.7, 4.2.1, 4.2.2, 4.2.7 through 4.2.11, 5.2.1, 5.2.3, 5.3.3, 6.1.7, 6.2.21, 6.2.22, 6.2.23, 6.2.28 through 6.2.31	C013	ESP
7020	No. 3 Recovery Furnace	40 CFR 63 Subpart MM 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(g) 391-3-1-.02(2)(gg)1(i)	3.3.2, 3.3.7, 3.3.28, 3.4.4 through 3.4.7, 4.2.1, 4.2.2, 4.2.5, 4.2.7 through 4.2.11, 5.2.1, 5.2.3, 6.1.7, 6.2.21, 6.2.22, 6.2.23, 6.2.28 through 6.2.31	C015-A C015	Primary ESP Standby ESP
7005	No. 1 Smelt Dissolving Tank	40 CFR 63 Subpart MM 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(gg)1(iii)	3.3.2, 3.3.28, 3.4.8 through 3.4.10, 4.2.1, 4.2.2, 4.2.7 through 4.2.11, 5.2.3, 6.1.7, 6.2.21, 6.2.22, 6.2.23, 6.2.28 through 6.2.31	C012	Dynamic Scrubber
7015	No. 2 Smelt Dissolving Tank	40 CFR 63 Subpart MM 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(gg)1(iii)	3.3.2, 3.3.28, 3.4.8 through 3.4.10, 4.2.1, 4.2.2, 4.2.7 through 4.2.11, 5.2.3, 6.1.7, 6.2.21, 6.2.22, 6.2.23, 6.2.28 through 6.2.31	C014	Dynamic Scrubber
7025	No. 3 Smelt Dissolving Tank	40 CFR 63 Subpart MM 391-3-1-.02(2)(b) 391-3-1-.02(2)(e) 391-3-1-.02(2)(gg)1(iii)	3.3.2, 3.3.28, 3.4.8 through 3.4.10, 4.2.1, 4.2.2, 4.2.7 through 4.2.11, 5.2.3, 6.1.7, 6.2.21, 6.2.22, 6.2.23, 6.2.28 through 6.2.31	C016	Dynamic Scrubber

Emission Units		Specific Limitations/Requirements		Air Pollution Control Devices	
ID No.	Description	Applicable Requirements / Standards	Corresponding Permit Conditions	ID No.	Description
Overfire Air Project					
1005	Riley Combination Boiler	391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.1, 3.3.30, 3.4.11, 3.4.16, 4.2.1, 4.2.12, 4.2.13, 4.2.14, 4.2.15, 5.2.2, 5.2.3, 5.2.13, 5.2.14, 5.3.3, 6.1.7, 6.2.2	C003 C004	Cyclone Separator Venturi Scrubber
1006	C.E. Combination Boiler	391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.1, 3.3.30, 3.4.11, 3.4.16, 4.2.1, 4.2.12, 4.2.13, 4.2.14, 4.2.15, 5.2.2, 5.2.3, 5.2.13, 5.2.15, 5.3.3, 6.1.7, 6.2.2	C005 C004	Cyclone Separator Venturi Scrubber
1017	C.E. Power Boiler	391-3-1-.02(2)(b) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	3.2.2, 3.4.11 through 3.4.13, 4.2.1, 4.2.2, 5.2.3, 5.3.3, 6.1.7, 6.2.25, 6.2.26, 6.2.27, 7.1.1, 7.1.3	None	
No. 3 Brown Stock Washer and Paper Machine Systems Modifications					
G016	No. 3A Brown Stock Washer System (including No. 3A drum washer and associated tanks)	40 CFR 52.21 40 CFR 63 Subpart S$^{\psi}$	3.3.2, 3.3.17 through 3.3.23, 3.3.25, 3.3.27, 3.3.31 through 3.3.34, 3.4.16, 4.2.16, 4.2.17, 6.1.7, 6.2.2	1005, 1006, 6076$^{\psi}$	Thermal oxidation followed by an alkaline scrubber
G014	Paper Machine System	40 CFR 52.21	2.1.1, 5.2.13, 6.1.7, 6.2.32	None	
G039	No. 4 Chemiwasher System (including associated tanks)	40 CFR 60 Subpart BB 40 CFR 63 Subpart S$^{\psi}$	3.3.1, 3.3.2, 3.3.17 through 3.3.23, 3.3.31 through 3.3.33, 3.3.35, 6.2.2	1005, 1006, 6076	Thermal oxidation followed by an alkaline scrubber

- Generally applicable requirements contained in this permit may also apply to emission units listed above.

ψ All existing permit conditions that incorporate applicable provisions of 40 CFR 63 Subpart S systems and that apply to the existing HVLC systems also apply to the No. 3A Brown Stock Washer System as of April 17, 2006. These already apply to the No. 4 Chemiwasher system.

3.2 Equipment Emission Caps and Operating Limits

3.2.2 The 24-hour sulfur input to the C.E. Power Boiler (Source Code 1017) shall be limited to 2,323 lbs/day, expressed as a daily 24-hour total for each operating day (defined as 7:00 AM to 7:00 AM the following morning).

3.3 Equipment Federal Rule Standards

<u>40 CFR 63 Subpart MM – Pulping Combustion Sources</u>

3.3.2 The Permittee shall be subject to all applicable provisions of 40 CFR 63 Subpart A – "General Provisions" as specified in Table 1 of 40 CFR 63 Subpart MM and 40 CFR 63 Subpart MM – "National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills" by the compliance date of March 13, 2004 for each Recovery Furnace, Smelt Dissolving Tank, and Lime Kiln.
[40 CFR 63.860(b)(1), 40 CFR 63.860(c), and 40 CFR 63.863(a)]

Cluster Rule

3.3.17 The Permittee shall control the total HAP emissions as specified in 40 CFR 63.443(c), (d) and (e) from the following equipment systems no later than April 17, 2006:
[40 CFR 63.443(a)(1)(ii) through (v)]

a. Each knotter or screen system with total HAP mass emission rates as specified below:

i. Each knotter system with emissions of 0.05 kg or more of total HAP per megagram of ODP (0.1 lb/ton).

ii. Each screen system with emissions of 0.10 kg or more of total HAP per megagram of ODP (0.2 lb/ton).

iii. Each knotter and screen system with emissions of 0.15 kg or more total HAP per megagram of ODP (0.3 lb/ton).

NOTE: Closed screens and knotters with no vent to atmosphere meet these standards.

b. Each pulp washing system

i. The No. 4 Chemiwasher System (Source Code: G039) and No. 3A Brown Stock Washer System (Source Code: G016) shall have enclosed washer hoods that, along with the associated washer system tanks, will be collected and controlled, per Conditions 3.3.18 and 3.3.23.
[40 CFR 63.443(a)(1)(ii) through (v)]

ii. No later than April 17, 2006, the existing No. 3 Brown Stock Washer System (Source Code: G016) hood/drums/vats that are being replaced by No. 3A Brown Stock Washer System hood/drums/vats shall be shut down. The balance of the existing No. 3 Brown Stock Washer System equipment (e.g., associated tanks, pumps, piping, etc) not being replaced as part of this washer project are designated as part of the No. 3A Brown Stock Washer System, subject to all applicable permit conditions listed for No. 3A Brown Stock Washer System.
[40 CFR 63 Subpart S]

Cluster Rule (Treatment)

3.3.23 The Permittee shall maintain a minimum temperature in the NCG Thermal Oxidizer (Source Code 6076) whenever combusting SOG, LVHC, and/or HVLC gases, at or above 1229^{o}F (the temperature demonstrated to meet the requirements of 40 CFR 63.443(d)(1) and 63.443(d)(2) during the initial performance testing required by Condition 4.2.3), or above the temperature established in Condition 4.2.18 for the additional gases from the No. 4 Chemiwasher System (Source Code: G039) and No. 3A Brown Stock Washer System (Source Code: G016), whenever burning HVLC gases, or shall combust the HVLC, LVHC, and/or SOG gases in a lime kiln or boiler per 40 CFR 63.443(d)(4).
[40 CFR 63.443(d)(1), 40 CFR 63.443(d)(2) and 40 CFR 63.443(d)(4)]

Additional 40 CFR 63 Subpart MM – Pulping Combustion Sources Requirements

3.3.28 The Permittee shall not discharge or cause the discharge into the atmosphere any gases which contain particulate matter in excess of the listed limit from the following equipment:
[40 CFR 63.862(a)(1)(i) and 40 CFR 63.862(a)(1)(iii)]

a. No. 1, 2, or 3 Recovery Furnaces (Source Codes: 7000, 7010, and 7020) - 0.10 g/dscm (0.044 gr/dscf), corrected to 8 percent oxygen.

b. No. 1, 2, or 3 Smelt Dissolving Tanks (Source Codes: 7005, 7015, and 7025) - 0.10 kg/Mg (0.20 pounds per ton) of black liquor solids fired.

c. No. 4 Lime Kiln (Source Code: 6063) - 0.15 g/dscm (0.064 gr/dscf), corrected to 10 percent oxygen.
[40 CFR 60 Subpart BB Subsumed]

3.3.29 Deleted – relocated to 6.1.7.b.vii and 6.1.7.b.viii

Overfire Air Project

3.3.30 After the completion of the boiler modification described by Application No. 15436 dated June 23, 2004, the Permittee shall not cause, let, suffer, permit, or allow emissions of fly ash or other particulate matter from the combined stack of the Riley Combination Boiler (Source Code 1005) and the C.E. Combination Boiler (Source Code 1006) in amounts greater than 302.21 tons per 12 consecutive months.
[40 CFR 52.21 Avoidance]

Additional Cluster Rule Requirements

3.3.31 For the LVHC destruction as required by Condition 3.3.16 and the HVLC destruction required by Condition 3.3.17, periods of excess emissions reported under 40 CFR 63.455 shall not be a violation of 40 CFR 63.443(c) and 63.443(d) provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi-annual reporting period does not exceed the following levels:
[40 CFR 63.443(e)]

a. 1% for control devices used to reduce the total HAP emissions from the LVHC system; and

b. 4% for control devices used to reduce the total HAP emissions from the HVLC system; and

c. 4% for control devices used to reduce the total HAP emissions from both the LVHC and HVLC systems.

3.3.32 The Permittee shall control the HAP emissions from each component of the HVLC systems (including System Source Codes: G016 and G039) using the Riley or C.E. Combination Boilers or the NCG Thermal Oxidizer (Source Codes: 1005, 1006, or 6076) no later than April 17, 2006. An HVLC system is defined as the collection of equipment including the pulp washing, knotter, screen, decker, and oxygen delignification systems, weak liquor storage tanks, and any other equipment serving the same function as those previously listed, as applicable by Condition 3.3.17.
[40 CFR 63.443(a)(1)(ii) through (iv), 40 CFR 63.443(d)(4), and 40 CFR 63.440(d)(1)]

3.3.33 The HVLC gases collected per the requirements of Condition 3.3.32 and controlled in either the Riley or C.E. Combination Boiler (Source Codes: 1005 and 1006) must be introduced with the combustion air of the Riley or C.E. Combination Boilers.
[40 CFR 63.443(d)(4)(ii)]

3.3.34 The regulated pulping process condensates listed in Condition 3.3.19 shall not be recycled to the enclosed No. 3A Brown Stock Washer System (Source Code: G016) as shower water. The shower water source used at the No. 3A Brown Stock Washer System shall be clean water only, which can include fresh water, clean reclaimed water, or clean process condensates (i.e., those not listed in Condition 3.3.19).
[40 CFR 52.21 BACT Limit]

3.3.35 The regulated pulping process condensates listed in Condition 3.3.19 may be recycled to the No. 4 Chemiwasher System (Source Code: G039) per Condition 3.3.22 at the 5th stage showers or further back in the No. 4 Chemiwasher System only. The shower water source used at the No. 4 Chemiwasher System final showers, i.e., the high pressure showers and knock off showers, shall be clean water only, which can include fresh water, clean reclaimed water, or clean process condensates (i.e., those not listed in Condition 3.3.19).
[40 CFR 52.21 BACT Limit]

3.4 Equipment SIP Rule Standards

3.4.16 The Permittee shall operate and maintain alternate incineration systems for the TRS collection system gases.
[391-3-1-.02(2)(a)(10)]

c. For the HVLC gases collected at the No. 3A Brown Stock Washer System (Source Code: G016) - the NCG Thermal Oxidizer (Source Code: 6076), the C.E. Combination Boiler (Source Code: 1006), and the Riley Combination Boiler (Source Code: 1005) may each be used as an equivalent primary control device.

PART 4.0 REQUIREMENTS FOR TESTING

4.1 General Testing Requirements

4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division's Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 which pertain to the emission units listed in Section 3.1 are as follows:

q. Method 29 for the determination of trace metals emissions in exhaust gases from stationary source combustion processes.

<u>40 CFR 63 Subpart MM Test Methods</u>

r. Method 1 or 1A for selection of sampling port location and number of traverse points.
[40 CFR 63.865(b)(5)(i)]

s. Method 2, 2A, 2C, 2D, 2F, or 2G for determining stack gas velocity and volumetric flow rate.
[40 CFR 63.865(b)(5)(ii)]

t. Method 3A or 3B for determining the oxygen concentration. The gas sample must be taken at the same time and at the same traverse points as the particulate sample. The voluntary consensus standard ANSI/ASME PTC 19.10-1981 – Part 10 may be used as an alternative to using Method 3B.
[40 CFR 63.865(b)(3)]

u. Method 3, 3A, or 3B for conducting gas analysis. The voluntary consensus standard ANSI/ASME PTC 19.10-1981 – Part 10 may be used as an alternative to using Method 3B.
[40 CFR 63.865(b)(5)(iii)

v. Method 4 for determining moisture content of stack gas.
[40 CFR 63.865(b)(5)(iv)]

w. Method 5 or 29 for determining the concentration or mass of particulate matter emitted. Method 17 may be used in lieu of Method 5 or Method 29 if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17, and the stack temperature is no greater than 205°C (400°F). For Methods 5, 29, and 17, the sampling time and sample volume for each run must be at least 60 minutes and 0.90 dscm (31.8 dscf) and the water must be used as the cleanup solvent instead of acetone in the sample recovery procedure.
[40 CFR 63.865(b)(1)]

x. For sources complying with Condition 3.3.28, the particulate matter concentration must be corrected to the appropriate oxygen concentration using the procedures of 40 CFR 63.865(b)(2).
[40 CFR 63.865(b)(2)]

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.
[391-3-1-.02(3)(a)]

4.2 Specific Testing Requirements

Recovery Furnace Modifications

4.2.4 Deleted

4.2.5 Within 60 days of the initial use of the standby ESP C015, the Permittee shall conduct an initial performance test for total PM and for opacity in order to meet compliance testing requirements for 40 CFR 63 Subpart MM – "National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources at Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mills". Data from these tests shall be used to establish the operational parameters required by Condition 6.1.7.c.
[391-3-1-.02(6)(b)]

4.2.6 Deleted

40 CFR 63 Subpart MM Testing Requirements

4.2.7 Deleted

4.2.8 During the initial performance test described in 40 CFR 63.865, the Permittee must establish operating ranges for the monitoring parameters in Conditions 5.2.3.c.ii and 5.2.3.c.iii as appropriate. Alternatively, the Permittee may base operating ranges on values recorded during previous performance tests or conduct additional performance tests for the specific purpose of establishing operating ranges, provided that test data used to establish the operating ranges are or have been obtained using the test methods required by 40 CFR 63.865. The Permittee must certify that all control techniques and processes have not been modified subsequent to the testing upon which the data used to establish the operating parameter ranges were obtained.
[40 CFR 63.864(j)(1) and 63.864(j)(2)]

4.2.9 The Permittee may establish expanded or replacement operating ranges for the monitoring parameters values listed in Conditions 5.2.3.c.ii and 5.2.3.c.iii during subsequent performance tests using the test methods listed in 40 CFR 63.865.
[40 CFR 63.864(j)(3)]

4.2.10 The Permittee must continuously monitor each parameter and determine the arithmetic average value of each parameter during each performance test. Multiple performance tests may be conducted to establish a range of parameter values.
[40 CFR 63.864(j)(4)]

4.2.11 Process data measured during the performance test must be used to determine the black liquor solids firing rate on a dry basis and the calcium oxide (CaO) production rate.
[40 CFR 63.865(b)(6)]

Overfire Air Project

4.2.12 For the Riley and C.E. Combination Boilers (Source Code 1005 and 1006), the Permittee shall conduct initial performance tests within 60 days after startup following completion of the modification described in Application No. 15436 dated June 23, 2004, to be conducted at the exit of the venturi scrubber (Source Code C004). The boilers shall be tested for particulate matter and sulfur dioxide.

4.2.13 During the initial performance test required in Condition 4.2.12, the Permittee must establish operating ranges for the monitoring parameter in Condition 5.2.3.a.ii.

4.2.14 The Permittee may establish expanded or replacement operating ranges for the monitoring parameter values listed in Condition 5.2.3.a.ii during subsequent performance tests using the test methods listed in Condition 4.1.3, including appropriate ranges for single boiler operation.

4.2.15 The Permittee must continuously monitor each parameter in Conditions 5.2.3.a.i, 5.2.3.a.ii, and 5.2.3.a.iv during each performance test, and determine the arithmetic average value of each parameter during each performance test. Multiple performance tests may be conducted to establish a range of parameter values for Condition 5.2.3.a.ii.

No. 3A Brown Stock Washer

4.2.16 The Permittee shall conduct an initial performance demonstration for the No. 3A Brown Stock Washer System (System Source Code: G016) on or before October 14, 2006 per the requirements of Condition 5.2.9 and provide certification that the equipment listed in Condition 3.3.17.b meets the requirements listed in Conditions 3.3.17 and 3.3.18.
[40 CFR 63.7 and 40 CFR 63.457]

4.2.17 The Permittee shall conduct a performance test for sulfur dioxide emissions at the Riley and CE Combination Boilers (Source Codes: 1005 and 1006) when burning only HVLC gases and bark to establish/verify the emission factor after addition of the vent gases from the No. 3A Brown Stock Washer System (Source Code: G016) to the HVLC gas system, to be conducted on or before October 14, 2006.
[391-3-1-.02(6)(b)]

4.2.18 The Permittee shall conduct a performance test on the Thermal Oxidizer (Source Code: 6076) when burning gases from all applicable equipment listed in 40 CFR 63.443(a)(1)(i) through 40 CFR 63.443(a)(1)(v) in order to demonstrate compliance with the requirements of 40 CFR 63.443(d)(1) and 63.443(d)(2) on or before October 14, 2006. This test will be used to verify or reestablish the temperature limit in Condition 3.3.23.
[40 CFR 63.457]

PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

5.1 General Monitoring Requirements

5.1.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.
[391-3-1-.02(6)(b)1]

5.2 Specific Monitoring Requirements

5.2.1 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated pollutants on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 63.864]

b. Opacity from Nos. 1, 2 and 3 Recovery Furnaces (Source Codes 7000, 7010 and 7020) and No. 4 Lime Kiln (Source Code 6063), to be sampled and analyzed for each successive 10-second period at a minimum and averaged and recorded for each successive 6-minute period.
[40 CFR 63.864(d)(3)]

5.2.3 The Permittee shall install, calibrate, maintain, and operate monitoring devices for the measurement of the indicated parameters on the following equipment. Data shall be recorded at the frequency specified below. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. C.E. and Riley Combination Boilers (Source Codes 1006 and 1005)

iv. pH of scrubbant entering the Venturi Scrubber (Source Code C004). Data shall be recorded hourly.

b. No. 4 Lime Kiln (Source Code: 6063)

i. Secondary current and secondary voltage for each electrical isolatable section (bus section) of the electrostatic precipitator for the No. 4 Lime Kiln (ESP Source Code C009). Data shall be recorded once per hour of operation. The total power for each precipitator shall be determined and recorded from the secondary parameters no less than once per two hours of operation.
[391-3-1-.02(2)(6)(b)1]

c. No. 1, No. 2 & No. 3 Smelt Dissolving Tanks (Source Codes 7005, 7015 and 7025)

i. Scrubber pH for each Scrubber (Source Codes C012, C014 and C016). Data shall be recorded at two-hour intervals.

ii. Scrubber make-up flow rate for each Scrubber (Source Codes C012, C014 and C016). The monitoring device used for continuous measurement of the recirculation flow rate must be certified by the manufacturer to be accurate within +/- 5 percent of the design scrubbing liquid flow rate. Data shall be recorded at 15-minute intervals and averaged over three hours.
[40 CFR 63.864(e)(13) and the May 1, 2003 approval letter from the Division]

iii. Recirculation flow rate from each Scrubber (Source Codes C012, C014 and C016. The monitoring device used for continuous measurement of the recirculation flow rate must be certified by the manufacturer to be accurate within +/- 5 percent of the design scrubbing liquid flow rate. Data shall be recorded at 15-minute intervals and averaged over three hours.
[40 CFR 63.864(e)(10) and 63.864(e)(10)(ii)]

d. No. 1, No. 2 & No. 3 Recovery Furnaces (Source Codes 7000, 7010, and 7020)

i. Secondary current and secondary voltage for each electrical isolatable section (bus section) of the electrostatic precipitator for the No. 1, No. 2 & No. 3 Recovery Furnaces (ESP Source Codes: C011, C013, and C015-A (and the standby ESP C015 when operating)). Data shall be recorded once per hour of operation. The total power for each precipitator shall be determined and recorded from the secondary parameters no less than once per two hours of operation.

f. Lime Slaker Lime Dust Suppression System (Source Code C007)

i. Water flow to nozzles. Data shall be recorded once per hour.

ii. Water flow pressure to nozzles. Data shall be recorded once per hour.

h. C.E. Power Boiler (Source Code 1017)

i. The amount of fuel oil fired in the C.E. Power Boiler (Source Code 1017) each 24-hour period representing the mill operating day (7:00 AM to 7:00 AM the following morning). Data shall be recorded daily.

5.2.13 The Permittee shall monitor and record the net paper production using the mill-operating day (7:00 AM to 7:00 AM the following morning). Data shall be recorded daily.
[40 CFR 52.21 BACT Limit]

PART 6.0 OTHER RECORD KEEPING AND REPORTING REQUIREMENTS

6.1 General Record Keeping and Reporting Requirements

6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)

iii. Any consecutive 3-hour period during which the average temperature in the NCG Thermal Oxidizer (Source Code 6076) measured in accordance with 5.2.2(a), is below 1229^{o}F when combusting LVHC, SOG and/or HVLC gases, or below the temperature established in Condition 4.2.18, whichever is higher.
[40 CFR 63.443(d)]

viii. Deleted – relocated to 6.1.7.b.vii

ix. Deleted – relocated to 6.1.7.b.vii

b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)

iii. Deleted

vi. Any 24-hour period in which the calculated sulfur input to the C.E. Power Boiler is greater than 2,323 lbs/day.

<u>40 CFR 63 Subpart MM</u>

vii. Periods of monitoring exceedances reported for Conditions 6.1.7.b.vii(A) and 6.1.7.b.vii(B) shall be a violation of 40 CFR 63 Subpart MM if the total period of monitoring exceedance (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time, in a quarterly reporting period, exceeds 6%.
[40 CFR 63.864(k)(2)(i) and 40 CFR 63.864(k)(2)(ii)]

(A) No. 1, 2, and 3 Recovery Furnaces (Source Codes: 7000, 7010, and 7020) for opacity greater than 35% (six-minute average).

(B) No. 4 Lime Kiln (Source Code: 6063) for opacity greater than 20% (six-minute average).

viii. Periods of monitoring exceedances reported for 6.1.7.b.viii(A) and (B) shall be a violation of 40 CFR 63 Subpart MM when six or more 3-hour average parameter values (excluding periods of startup, shutdown, or malfunction) within any 6-month reporting period are outside the parameter limits listed below. For purposes of determining the number of non-opacity monitoring exceedances, no more than one exceedance will be attributed in any given 24-hour period. Note: The above mentioned provisions are only for determining 40 CFR 63 Subpart MM exceedances. Single event exceedances/excursions of the following parameters may still occur for other regulations.
[40 CFR 63.864(k)(2)(iii) and (vi) and 40 CFR 63.864(k)(3)]

(A) Any three-hour rolling average in which the Scrubber make-up flow rate across the Smelt Tank Scrubbers (Source Codes: C012, C014, and C016) is less than 7 gpm or the established value during the initial performance test required in Condition 4.2.7, whichever is greater.

(B) Any three-hour rolling average in which the Scrubbant Recirculation Flow Rate from the Smelt Tank Scrubbers (Source Codes: C012, C014, and C016) is less than 16 gpm or the established value during the initial performance test required in Condition 4.2.7, whichever is greater.

Paper Production

ix. Any consecutive twelve-month period during which the facility produces more than 547,620 oven-dried tons of paper (equivalent to 575,000 machine-dried tons of paper at 5% moisture).
[40 CFR 52.21]

c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)

C.E. Combination & Riley Combination Boilers

ii. Before completion of the boiler modification project as described in Application No. 15436 dated June 23, 2004:

Any four consecutive hours during which the venturi scrubber for the C.E. Combination Boiler and Riley Combination Boiler has a scrubbant recirculation flow rate less than 1,100 gallons per minute.

After completion of the boiler modification project as described in Application No. 15436 dated June 23, 2004:

Any four consecutive hours during which the venturi scrubber for the C.E. Combination Boiler and Riley Combination Boiler has a scrubbant recirculation flow rate less than 90% of the monitoring parameter operating ranges established during the initial performance tests as required by Conditions 4.2.13, 4.2.14, and 4.2.15.

iii. Before completion of the boiler modification project as described in Application No. 15436 dated June 23, 2004:

Any four consecutive hours while burning TRS during which the pH of the scrubbant entering the Venturi Scrubber (Source Code C004) from the Combination Boilers is below 6.3.

After completion of the boiler modification project as described in Application No. 15436 dated June 23, 2004:

Any four consecutive hours during which the pH of the scrubbant entering the Venturi Scrubber (Source Code C004) from the Combination Boilers is below 6.3.

Recovery Furnaces (Source Codes: 7000, 7010, and 7020)

iv. Any four consecutive hours during which the secondary power for the corresponding precipitator which is less than the following:

(A) Recovery Furnace No. 1 - 50,000 watts.

(B) Recovery Furnace No. 2 - 44,000 watts.

(C) Recovery Furnace No. 3 - 80,000 watts. (in the case of the standby ESP C015, refer to Condition 4.2.5).

Smelt Dissolving Tanks (Source Codes: 7005, 7015, and 7025)

v. Any four consecutive hours during which the following parameters are less than the indicated value for any of the smelt tanks (Source Codes: 7005, 7015, and 7025):

(A) Scrubbant make-up flow – 7 gpm

(B) Scrubbany recirculation flow rate – 16 gpm

(C) Scrubbant Recirculation pH - 11.5

NCG Thermal Oxidizer/Scrubber System (Cluster Rule)

ix. Any five minute period of process operation during which any portion of the total HAP emissions from each LVHC system, SOG system or HVLC system in the kraft pulp mill are not controlled.
[40 CFR 63.443(a)(1)(i) and (a)(2)]

No. 4 Lime Kiln (Source Code: 6063)

x. Any four consecutive hours during which the secondary power for the precipitator serving the No. 4 Lime Kiln is less than 7,500 watts.

Lime Slaker Lime Dust Suppression system (Source Code: C007)

xiii. Any four consecutive hours during which the water flow to the Lime Dust Suppression System is less than 6.5 gpm.

xiv. Any four consecutive hours during which the water flow pressure to the Lime Dust Suppression System nozzles is less than 25 psi.

d. In addition to the excess emissions, exceedances and excursions specified above, the following should also be included with the report required in Condition 6.1.4:

vii. Records required by Condition 6.2.27.

40 CFR 63 Subpart MM

viii. Any period when ten consecutive 6-minute opacity averages result in a measurement greater than 20% opacity for No. 1, 2, or 3 Recovery Furnaces (Source Codes: 7000, 7010, and 7020).
[40 CFR 63.864(k)(1)(i)]

ix. Any period when ten consecutive 6-minute opacity averages result in a measurement greater than 20% opacity for No. 4 Lime Kiln (Source Code: 6063).
[40 CFR 63.864(k)(1)(i)]

6.1.9 Periodic Startup, Shutdown, and Malfunction (SSM) Reporting:
[40 CFR 63.6(e)(3) and 40 CFR 63.10(d)(5)(i)]

a. Where actions taken during SSM events were consistent with the SSM plan, the periodic SSM report shall confirm that actions taken during the reporting period are consistent with the SSM plan. The report shall include information including the number, duration, and a brief description of each type SSM event that occurred during the reporting period and which caused or may have caused an applicable emissions limitation to be exceeded.

b. Where actions taken during SSM events were not consistent with the SSM plan, the report shall identify the event even if the source did not exceed an applicable emission limitation in the relevant standard.

c. The periodic SSM reports shall be submitted semi-annually for the 6-months periods ending June 30 and December 31. The report shall consist of a letter containing name, title, and signature of the responsible official who is certifying its accuracy. All revisions to the SSM plan made during the reporting period shall be included in the semi-annual report. The semi-annual report shall be postmarked no later than 30 days following the end of the reporting period.

6.2 Specific Record Keeping and Reporting Requirements

NCG

6.2.2 The Permittee shall maintain the following records:

a. The hours of operation during which the Combination Boilers (Source Codes 1005 & 1006) are used as control devices for the NCG system,
[40 CFR 52.21 Avoidance and 391-3-1-.02(6)(b)1]

b. The hours of operation during which the Thermal Oxidizer (Source Code 6076) is used as the control device for the HVLC gases from the No. 4 Chemiwasher System (Source Code: G039) and the No. 3A Brown Stock Washer (Source Code: G016).
[391-3-1-.02(6)(b)1]

6.2.6 Deleted

6.2.20 The Permittee shall notify the Division in writing within seven days of shutting down the No. 3 Recovery Furnace in order to transfer particulate emission control from the primary ESP, C015-A, to the standby ESP, C015. The letter shall include the reason for the use of the standby unit and any schedule to return to the use of the primary control device.

<u>40 CFR 63 Subpart MM</u>

6.2.21 The Permittee shall implement the corrective action plan as developed in Condition 6.2.22 if any of the following monitoring exceedances occur:
[40 CFR 63.864(k)(1)]

i. No. 1 Recovery Furnace (Source Code: 7000) opacity greater than 20% for 10 consecutive six-minute averages.
[40 CFR 63.864(k)(1)(i)]

ii. No. 2 Recovery Furnace (Source Code: 7010) opacity greater than 20% for 10 consecutive six-minute averages.
[40 CFR 63.864(k)(1)(i)]

iii. No. 3 Recovery Furnace (Source Code: 7020) opacity greater than 20% for 10 consecutive six-minute averages.
[40 CFR 63.864(k)(1)(i)]

iv. No. 4 Lime Kiln (Source Code: 6063) opacity greater than 20 % for 10 consecutive six-minute averages.
[40 CFR 63.864(k)(1)(i)]

v. Smelt Tank Scrubbers (Source Codes: C012, C014, or C016) scrubber make-up flow rate less than 7 gpm for any three-hour rolling average.
[40 CFR 63.864(k)(1)(v)]

vi. Smelt Tank Scrubbers (Source Codes: C012, C014, or C016) scrubber recirculation flow rate less than 16 gpm for any three-hour rolling average.
[40 CFR 63.864(k)(1)(ii)]

6.2.22 The Permittee shall develop and implement a written startup, shutdown, and malfunction plan that describes in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning processes and air pollution control equipment used to comply with 40 CFR 63 Subpart S and 40 CFR 63 Subpart MM. As required under §63.8(c)(1)(i), the plan shall identify all routine or otherwise predictable CMS malfunctions. In addition to the information required in 40 CFR 63.6(e), the plan must also include the requirements in 40 CFR 63.866(a)(1) and (2). The plan shall be available for inspection or submittal to the Division when requested.
[40 CFR 63.6(e) and 40 CFR 63.866(a)]

6.2.23 In addition to the general records required by Condition 6.1.4, the Permittee shall maintain records of the following information:
[40 CFR 63.866(c)]

a. Black liquor solids firing rates in either Mg/day or tons/day for No. 1, 2, and 3 Recovery Furnaces;

b. Calcium oxide (CaO) production rates in Mg/day or tons/day for No. 4 Lime Kiln;

c. Parameter monitoring data required by Conditions 5.2.3.c.ii and 5.2.3.c.iii, including any period when the operating parameter levels were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken;

d. Documentation of supporting calculations for compliance determinations made under Condition 4.1.3;

e. Monitoring parameter ranges established for each Smelt Dissolving Tank;

f. Records of the corrective actions taken as required by Condition 6.2.21.a, including the cause of the deviation, the time the deviation occurred, the time corrective action was initiated and completed, and the corrective action taken.

6.2.24 The Permittee shall submit the applicable notifications as required by 40 CFR 63 Subpart A – "General Provisions" as specified in Table 1 of 40 CFR 63 Subpart MM.
[40 CFR 63.867(a)(1)]

Overfire Air Project

6.2.25 The Permittee shall maintain a record of the total amount of fuel oil fired in the C.E. Power Boiler for each calendar day as required by Condition 5.2.3.h.i.

6.2.26 The Permittee shall calculate and record the rolling average sulfur content of the 25 truck loads of fuel oil most recently received as of 7:00 AM into the storage tank used to supply fuel to the C.E. Power Boiler. Data shall be recorded daily.

6.2.27 The Permittee shall calculate and record daily the sulfur input to the C.E. Power Boiler for each 24-hour operating period (7:00 AM to 7:00 AM the following morning) using data required by Conditions 6.2.25 and 6.2.26 as follows:

Sulfur input (lbs/day) = 78.5 x Sulfur Content (%) x Amount of fuel oil (gallons) / 1000

Additional 40 CFR 63 Subpart MM Requirements

6.2.28 The Permittee shall maintain records of any occurrence when corrective action is required by Condition 6.2.21 and when a violation is noted under Conditions 6.1.7.b.vii or 6.1.7.b.viii.
[40 CFR 63.866(b)]

6.2.29 The Permittee shall report quarterly if a measured parameter meets any of the conditions specified in Condition 6.2.21 or Conditions 6.1.7.b.vii and 6.1.7.b.viii. This report must contain the information specified in 40 CFR 63.10(c) as well as the number and duration of occurrences when the source met or exceeded the conditions in Conditions 6.1.7.b.vii and 6.1.7.b.viii, and the number and duration of occurrences when the source met or exceeded the conditions in Condition 6.2.21. Reporting excess emissions below the violation thresholds of Condition 6.2.21 or Conditions 6.1.7.b.vii and 6.1.7.b.viii does not constitute a violation of the applicable standard. When no exceedances of parameters have occurred, the Permittee shall submit a semiannual report stating that no excess emissions occurred during the reporting period. The Permittee may combine excess emissions and/or summary reports for the mill with the requirements of 40 CFR 63 Subpart S.
[40 CFR 63.867(c)]

Paper Production

6.2.30 The Permittee shall maintain records of the daily production rate of paper.
[40 CFR 52.21 BACT Limit]

PART 7.0 OTHER SPECIFIC REQUIREMENTS

7.1 Operational Flexibility Associated with this Amendment

7.1.1 The Permittee is authorized to increase the height of the stack of the C.E. Power Boiler (Source Code 1017) per modeling analysis submitted on November 19, 2004, in lieu of complying with Permit Conditions 3.2.2, 5.2.3.h.i, 6.1.7.d.vii, 6.2.25, 6.2.26, and 6.2.27.

7.1.2 Deleted

7.1.3 Upon notification to the Division regarding completion of the stack height increase for the C.E. Power Boiler (Source Code: 1017), Permit Conditions 3.2.2, 5.2.3.h.i, 6.1.7.d.vii, 6.2.25, 6.2.26, 6.2.27, and 7.1.1 become null and void.

7.12.1 Revocation of Existing Permits and Amendments

The following Air Quality Permits and Amendments are subsumed by this permit and are hereby revoked:

Air Quality Permit Number(s)	Dates of Original Permit Issuance or Amendment
2631-185-0001-V-01-1	October 7, 2003
2631-185-0001-V-01-2	February 24, 2004
2631-185-0001-V-01-3	April 21, 2004
2631-185-0001-V-01-4	June 7, 2004
2631-185-0001-V-01-5	March 7, 2005